IN THE CLAIMS

1. (Original) An arrangement for generating a power up clear (PUC) signal based on a value of a supply voltage, the arrangement comprising:

a first circuit element of a first conductivity type having a first characteristic threshold voltage;

a second circuit element of a second conductivity type having a second characteristic threshold voltage;

a first circuit, including the first circuit element, configured to provide a first comparison input signal;

a second circuit, including the second circuit element, configured to provide a second comparison input signal; and

a comparator for comparing the first and second comparison input signals, to cause the PUC signal to transition to an active state when one of the first and second comparison signals crosses another of the first and second comparison signals in response to an increasing magnitude of the supply voltage.

2. (Original) The arrangement of Claim 1, wherein:

the comparator determines the PUC signal based only on the first and second comparison input signals, without reference to any externally supplied reference voltages or currents or bias voltages or currents.

3. (Original) The arrangement of Claim 1, wherein:

the first characteristic threshold voltage is an n-channel MOSFET threshold voltage.

4. (Original) The arrangement of Claim 3, wherein the first circuit includes:

an n-channel MOSFET; and

a resistance, operative with the n-channel MOSFET so as to provide the first comparison signal to the comparator.

5. (Original) The arrangement of Claim 4, wherein:

the first circuit is configured to provide the first comparison signal that is substantially constant after the supply voltage exceeds the n-channel MOSFET threshold voltage.

6. (Original) The arrangement of Claim 1, wherein:

the second characteristic threshold voltage is a p-channel MOSFET threshold voltage.

7. (Original) The arrangement of Claim 6, wherein the second circuit includes:

a p-channel MOSFET; and

a resistance ladder, operative with the p-channel MOSFET so as to provide the second comparison signal to the comparator.

8. (Original) The arrangement of Claim 7, wherein:

the second circuit is configured to provide the second comparison signal to that varies as a function of the supply voltage and crosses the first comparison signal when the supply voltage has increased to a value exceeding a sum of the first and second characteristic threshold voltages.

9. (Original) An arrangement of Claim 1, further comprising:

a hysteresis arrangement, configured to ensure that, after the comparator causes the PUC signal to transition to an active state in response to the supply voltage exceeding a first level, the PUC signal remains in the active state for so long as the supply voltage continues to exceed a second level that is a non-zero voltage margin smaller than the first level.

10. (Original) The arrangement of Claim 9, wherein the hysteresis arrangement includes:

a switch element, configured to adjust at least one of the first and second comparison signals.

11. (Original) The arrangement of Claim 10, wherein:

the hysteresis arrangement further includes a hysteresis resistance; and

the switch element includes a transistor that selectively removes the hysteresis resistance in response to a first state of the PUC signal and replaces the hysteresis resistance in response to a second state of the PUC signal.

12. (Original) The arrangement of Claim 11, wherein:

the transistor selectively shorts out the hysteresis resistance in response to the non-active state of the PUC signal, and enters a high impedance state so as to replace the hysteresis resistance in response to the active state of the PUC signal, so as to adjust the second comparison signal.

13. (Currently Amended) The arrangement of Claim 1, wherein:

the first characteristic threshold voltage is an n-channel MOSFET threshold voltage;

the first circuit includes an n-channel MOSFET and a resistance, operative with the n-channel MOSFET so as to provide the first comparison signal to the comparator;

the first circuit is configured to provide the first comparison signal that is substantially constant after the supply voltage exceeds the n-channel MOSFET threshold voltage;

the second characteristic threshold voltage is a p-channel MOSFET threshold voltage; [.]

the second circuit includes a p-channel MOSFET, and a resistance ladder that is operative with the p-channel MOSFET so as to provide the second comparison signal to the comparator; and

the second circuit is configured to provide the second comparison signal that varies as a function of the supply voltage and crosses the first comparison signal when the supply voltage has increased to a value exceeding a sum of the first and second characteristic threshold voltages.

14. (Original) A system comprising the PUC signal generating arrangement of Claim 1, and further comprising:

a receiving circuit that is configured and arranged to receive the PUC signal, that is connected to the same supply voltage as the PUC signal generating circuit, and that includes elements of a same type as the first circuit element of the first conductivity type and the second circuit element of the second conductivity type.

15. (Original) A method for generating a power up clear (PUC) signal based on a value of a supply voltage, the method comprising:

providing a first comparison input signal that is based on a first characteristic threshold voltage of a first circuit element of a first conductivity type;

providing a second comparison input signal that is based on a second characteristic threshold voltage of a second circuit element of a second conductivity type; and

comparing the first and second comparison input signals, to cause the PUC signal to transition to an active state when one of the first and second comparison signals crosses another of the first and second comparison signals in response to an increasing magnitude of the supply voltage.

16. (Original) The method of Claim 15, wherein the comparing step constitutes:

determining the PUC signal based only on the first and second characteristic threshold voltages, without reference to any externally supplied reference voltages or currents or bias voltages or currents.

17. (Original) The method of Claim 15, wherein:

the first characteristic threshold voltage is an n-channel MOSFET threshold voltage.

18. (Original) The method of Claim 15, wherein:

the second characteristic threshold voltage is a p-channel MOSFET threshold voltage.

19. (Original) The method of Claim 15, wherein the comparing step constitutes:

determining the PUC signal based only on (1) an n-channel MOSFET threshold voltage constituting the first characteristic threshold voltage, and (2) a p-channel MOSFET threshold voltage constituting the second characteristic threshold voltage, without reference to any externally supplied reference voltages or currents or bias voltages or currents.

20. (Original) A system configured to perform the method of Claim 15.